

Specification Sheet



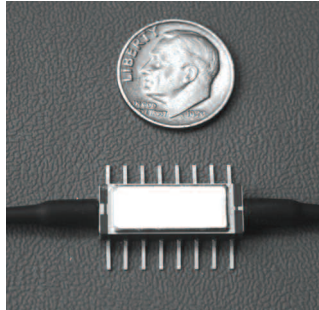
Modules

TruePhase® IPLM Inline Polarimeter Platform



The TruePhase® IPLM series of in-line fiber polarimeters deliver highly accurate and reliable optical polarization measurements for a broad range of applications. The compact and flexible design allows OEM's to customize and tune performance to fit their application.

IPLM devices can be used in test equipment for fast, accurate, and reliable polarization state measurements. In telecommunications systems, IPLM's can be used to monitor key network performance parameters such as OSNR and PMD. IPLM's can also be used in sensor applications for multiple-parameter-monitoring.



Features and Benefits:

- In-line Operation (no taps required)
- Low Insertion Loss (IL)
- Low PDL
- High speed
- Wide optical bandwidth
- Small Size
- Hermetic Package

Applications:

- 40G/100G Monitoring in Pol-Mux Phase-Modulated transmission systems
- PMD monitoring/measurement
- Polarization analysis and stabilization
- OSNR monitoring and measurement

Optical Specifications

| Parameter | Specification |
|---|-------------------------------------|
| Operating Wavelength Range | 100 nm (Full C+L Band) |
| Return Loss | >55 dB |
| Insertion Loss (IL) | <0.8 dB |
| Wavelength Dependent Variation (Loss) | <0.1 dB |
| PDL (100 pm filtered and averaged in the respective BW) | 0.15 dB max |
| SOP Accuracy | within 1% at calibration wavelength |
| DOP Accuracy | ± 1.5% at calibration wavelength |
| Optical Input Power Range | -15 to +5 dBm |
| Storage Temperature | -40 to +85°C |
| Operating Temperature | -5 to +75°C |

Electronic Specifications

| Parameter | Specification |
|------------------------|------------------------------------|
| Photodiode Bias | 6V max (can also be used unbiased) |
| Effective Responsivity | 9mA/W |
| Thermistor Resistance | 10k (NTC) |

Mechanical Specifications

| Parameter | Specification |
|--------------------|---|
| Dimensions | 20.5 mm x 7.37 mm x 4.28 mm |
| Fiber Interface | PM fiber, 900 μm loose tube |
| Optical Connectors | FC-UPC input and output |
| Package | 16-pin hermetic Mini-FLAT style package |

*All Dimensions in mm

Optical Fiber:

- PANDA-type
- 900μm Loose Tube
- Blue → Input, Red → Output
- Pigtail Length Approx. 1m
- FC-UPC Connectors on both input and output

| Pin | I/O | Pin | I/O |
|-----|-------------|-----|-------------|
| 1 | PD1 Cathode | 16 | NC |
| 2 | PD1 Anode | 15 | NC |
| 3 | GND | 14 | NC |
| 4 | Thermistor | 13 | NC |
| 5 | Thermistor | 12 | PD2 Anode |
| 6 | PD3 Cathode | 11 | PD2 Cathode |
| 7 | PD3 Anode | 10 | PD4 Anode |
| 8 | NC | 9 | PD4 Cathode |

Recommended Pad Layout

*ZIF sockets also available – contact OFS for details

☎ SOMERSET LOCATION

1.732.748.7403

25 Schoolhouse Road
Somerset, NJ 08873, USA
info@SpecialtyPhotonics.com

This document is for informational purposes only and is not intended to modify or supplement any OFS warranties or specifications relating to any of its products and services. Drawings are not to scale. OFS reserves the right to make changes at any time without notice to the products and specifications described in this document.

TruePhase is a registered trademark of OFS Fitel, LLC.

Copyright © 2011

OFS Fitel, LLC.

All Rights Reserved.

0911

Ordering Information

| Product Code | Description |
|---|--------------------------|
| IPLM-155G-G1-SMS: Location ☎ | SM to SM Fiber Interface |
| IPLM-155G-G1-SMP: Location ☎ | SM to PM Fiber Interface |
| IPLM-155G-G1-PMP: Location ☎ | PM to PM Fiber Interface |